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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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MICHAEL BEST & FRIEDRICH LLP Two Prudential Plaza 180 North Stetson Avenue, Suite 2000 CHICAGO, IL 60601			FABER, DAVID	
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			2178	

DATE MAILED: 04/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/814,522	HAILEY ET AL.
	Examiner	Art Unit
	David Faber	2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 31 March 2004.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-45 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-45 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 31 March 2004 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date 7/19/2004.

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
 5) Notice of Informal Patent Application (PTO-152)
 6) Other: _____.

DETAILED ACTION

1. This office action is in response to the application filed 31 March 2004.
This action is made Non-Final.
2. Claims 1-45 are pending. Claims 1, 19, 27, 34, 35, 39 and 43 are independent claims.

Information Disclosure Statement

3. The information disclosure statement filed 19 July 2004 fails to comply with the provisions of 37 CFR 1.97, 1.98 and MPEP § 609 because a number of references listed in "Other Prior Art" on 1449B form fail to list the date of for that reference that was published. It has been placed in the application file, but the information referred to therein has not been considered as to the merits. Applicant is advised that the date of any re-submission of any item of information contained in this information disclosure statement or the submission of any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the statement, including all certification requirements for statements under 37 CFR 1.97(e). See MPEP § 609.05(a).

Drawings

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 190 and 192 in FIG 12. Corrected drawing sheets in compliance with 37

CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "195" has been used to designate both citation and elements in FIG 12 and table elements in FIG 13. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: data table 330, and data 332. Corrected drawing sheets in compliance with

37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

7. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "370" has been used to designate composition element, font element, field modifiers, and Field Table in FIG 22. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 19-26, and 34 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

As per claims 19-26 and 34, the Applicant fails to disclose either open-ended or closed-ended claim language. It is therefore fails to clearly set forth the metes and bounds of the patent protection desired.

Claims not individually address are rejected for their dependence upon a rejected based claim.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9, 13-18, 24, 28-29, 37 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poole et al (US Patent #6,006,242, patented 12/21/1999) in further view of Bantz et al (US PGPub 2003/0163809, published 8/28/2003)

As per independent Claim 1, Poole et al discloses a system:

- An assembly facility (FIG 1, 3 & 4: disclose document creation by assembling components) configured to be coupled to an origination platform (Column 5,

lines 1-24: content is specified or inputted to be included into the document originated from collecting transaction data (Column 29, lines 48-49, STEP 1)

- A knowledge base configured to be coupled to the assembly facility (FIG 3, lines 29-48)
- A content management system configured to be coupled to the knowledge base and to support authoring of content and rules (Poole et al discloses a system spread out over three layers that stores rules, (Column 6, line 34: rules that dictate the access and utilization of components) documents and components in the knowledge base.(Column 6, lines 17-28) These rules are used by many applications to govern the document generation that include ability to create documents, and using rules for formatting and validating. (e.g. Column 9-Column 13, line 2)

However, Poole et al discloses his invention is described within the context of an object-oriented programming implementation and that knowledge base acts as a database storing information (Column 6, lines 10-28), but fails to specify the knowledge base to store objects in an object-relational hierarchy. However, Bantz et al discloses the knowledge base is organized as a database that includes being object-relational for storing data objects. (Paragraph 0039, lines 8-10)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's method with Bantz et al's method since Bantz et al's method using database as object-relational would have allowed developers to integrate the database with their own custom data types and methods.

As per dependent Claim 2, Poole et al discloses a system:

- Wherein the assembly facility is configured to validate data received from the origination platform (Column 29, lines 47-48 discloses data being collected. Column 5, lines 3-5, discloses the develop specifies content to be included in the document to meet the rules and regulations. Thus, the data is validated at step 36, FIG 1 wherein all business, legal, and government requirements apply to a particular entity reference are duly satisfied which produces components having integrity by virtue of being complaint with requirements (rules), Column 5, 15-24)

As per dependent Claim 3, Poole et al discloses a system:

- Wherein the assembly facility is configured to apply a precedence process (Column 5, lines 44-52; Column 6, lines 55-63: A precedence is in place when one or more matches occur)

As per dependent Claim 4, Poole et al discloses a system:

- Wherein the assembly facility is configured to apply rules to supplied transaction data to select, modify, or generate content. (Column 29, lines 47-64 discloses an embodiment of document construction. Transaction data is supplied, and then is used for generating documents that includes resolving

document entities described in Column 5, lines 14-24 and for transformations described in Column 17, lines 45-64)

As per dependent Claim 5, Claim 5 recites similar limitations as in Claims 2-4 combined and are similar rejected under rationale.

As per dependent Claim 6, Poole et al discloses a system:

- Wherein the assembly facility is configured to generate a resolved, markup language file. (Column 2, lines 40-49: Discloses using the invention to create a World Wide Web page, written in SGML (Column 3, lines 47-54))

As per dependent Claim 7, Poole et al discloses the use of stylesheets, which are document formatting rules, wherein the rules are applied to resolved SGML documents (Column 11, lines 25-35) and for transforming (Column 12, lines 25-26) a SGML document into another SGML document (Column 11, lines 47-50)

However, Poole et al fails to specify the markup language file is an XML file. However, it was well-known to one of ordinary skill in the art at the time of Applicant's invention that XML is a subset of SGML, wherein all features of the SGML language incorporate into XML document, thus allowing an XML document to be transformed into another document using a stylesheet. Thus, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's method and Bantz et al's method with using XML file in place of SGML since it benefits of being

designed pragmatically, to be compatible with existing standards while solving the relatively new problem of sending richly structured documents over the web.

As per dependent Claims 8 and 9, Poole et al discloses a system wherein the assembly facility is configured to operate with an interface to receive information from the origination wherein the interface is an application programming interface. (Column 9, lines 1-18: Discloses multiple layers used for receiving and sending data operated by APIs)

As per dependent Claims 13-15, Claim 13 recites similar limitations as in Claim 1 and is similar rejected under rationale. Furthermore, Poole et al discloses a knowledge base storing a plurality of information such as content and rules. However, in conjunction with Bantz et al's object-relational database and the rationale incorporated, it was well known to one of ordinary skill in the art at the time of Applicant's invention that since the database is relational, meaning data is stored in tables, all the content and rules stored in the knowledge base would be stored in tables. In addition, knowledge base stores collection of documents that may been created by Poole, and so, those documents are validate by DTDs, stored in the knowledge base or correspond to the rules of the DTD.

It would been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's and Bantz et al's methods with object-relational databases using tables since it would have provided the benefit of any changes, updates or amendments to data information in one table of a relation database affects that same information in any other table utilizing it.

As per dependent Claims 16-18, Poole et al discloses a knowledge base that include text components that include SGML text components. However, in conjunction with Bantz et al's object-relational database and the rationale incorporated, Poole et al's knowledge base would act as a object-relational database, wherein it was well-known in the art at the time of Applicant's invention that a object-relational database would contain tables that link to the all of the objects within the database.

It would been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's and Bantz et al's methods with object-relational databases using tables since it would have provided the benefit of any changes, updates or amendments to data information in one table of a relation database affects that same information in any other table utilizing it.

In addition, Poole et al fails to specifically disclose the text fragments are in XML. However, it was well-known to one of ordinary skill in the art at the time of Applicant's invention that XML is a subset of SGML, wherein all features of the SGML language incorporate into XML document, thus allowing an XML document to be transform into another document using a stylesheet. Thus, it would been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's method and Bantz et al's method with using XML file in place of SGML since it benefit of being designed pragmatically, to be compatible with existing standards while solving the relatively new problem of sending richly structured documents over the web.

As per dependent Claim 24, Claim 24 recites similar limitations as in Claim 2, and similarly rejected under rationale.

As per dependent Claim 28, Claim 28 recites similar limitations as in Claim 1, and is similarly rejected under rationale.

As per dependent Claim 29, Claim 29 recites similar limitations as in Claim 2, and is similarly rejected under rationale.

As per dependent Claim 37, Claim 37 recites similar limitations as in Claim 2 is rejected under similar rationale.

As per dependent Claim 41, Claim 41 recites similar limitations as in Claim 2 is rejected under similar rationale.

11. Claims 19-³~~22~~, 27, 30-32, 34-36, 38-40, and 42-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poole et al (US Patent #6,006,242, patented 12/21/1999)

As per independent Claim 19, Poole et al discloses a medium:

- acquiring data from an origination platform; (Column 5, lines 1-24: content is specified or inputted to be included into the document originated from collecting transaction data (Column 29, lines 48-49, STEP 1))
- interacting with a knowledge base and applying precedence and rules to create a first set of documents (FIG 3 & 4; Column 6, lines 15-48; Column 7, lines 28-60; Column 5, lines 44-52; Column 6, lines 55-63. In addition, a

document can comprise of many pages thus wherein each page is considered a document, therefore resulting in a set of documents.)

- modifying a set of documents based on user input; (Abstract, lines 25-28, FIG 3; Column 6, lines 29-48 : Discloses creating a electronic form using document process of Poole et al. Once a document been created, Poole et al discloses using the ability to merge data onto the electronic form that was created. Doing so is an method of modifying a document or a set of document. In addition, a document/form can comprise of many pages thus wherein each page is considered a document, therefore resulting in a set of documents.)

- validating data acquired from the origination platform; and (Column 29, lines 47-48 discloses data being collected. Column 5, lines 3-5, discloses the develop specifies content to be included in the document to meet the rules and regulations. Thus, the data is validated at step 36, FIG 1 wherein all business, legal, and government requirements applicable to a particular entity reference are duly satisfied which produces components having integrity by virtue of being complaint with requirements (rules), Column 5, 15-24)

However, Poole et al fails to specifically disclose interacting with a knowledge base and applying precedence and rules to create a second set of documents. It was well-known to one of ordinary skill in the art to create another set of documents given the knowledge of how to create a first set, because it would have obvious to one of ordinary skill in the art at the time of Applicant's invention that a method of creating a

dynamic documents may be replicated to gain repeated benefit of flexibility of using one method when creating documents.

As per dependent Claims 20-22, Poole et al discloses a medium comprising instructions for transforming each of the documents in the second set into a file wherein instructions include applying style sheets to the file, and converting the file to a second file having a different format. (Column 11, lines 25-50: Discloses creating a SGML file with stylesheets, and being able to transform one SGML file into another. In addition, Poole et al system includes Transformation Services which would be able to transform or convert documents from one format to another. Thus, a SGML file/document could be converted from SGML to another file that specified. (Column 12, lines 25-45)

However, Poole et al fails to specify the file is an XML file. However, it was well-known to one of ordinary skill in the art at the time of Applicant's invention that XML is a subset of SGML, wherein all features of the SGML language incorporate into XML document, thus allowing an XML document to be transform into another document using a stylesheet. Thus, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's method with using XML file in place of SGML since it benefit of being designed pragmatically, to be compatible with existing standards while solving the relatively new problem of sending richly structured documents over the web.

As per dependent Claim 23, Claim 23 recites similar limitations as in Claim 19 and is similarly rejected under rationale. Furthermore, Poole et al discloses instructions

for generating a document from the first set of documents that is a layout document.

(Column 2, lines 40-49: Discloses using the invention to create a World Wide Web page, written in SGML (Column 3, lines 47-54))

As per independent Claim 27, Claim 27 recites similar limitations as in Claim 19 and is similarly rejected under rationale. Furthermore, Poole et al discloses a method:

- an end product contain an object; (an end product is a document which can be viewed as a document having many pages, components or instance that can viewed as objects)
- extracting rules from the knowledge base (FIG 19,20; Column 42, lines 26-62: Rules are taken from the knowledge base and converting into a Rule Network.)
- assembling end products based upon applying precedence and rules. (FIG 1, 3 & 4: disclose document creation by assembling components; Column 5, lines 44-52; Column 6, lines 55-63)

As per dependent Claim 30, Claim 30 recites similar limitations as in Claim 19, and is similarly rejected under rationale.

As per dependent Claim 31, Poole et al discloses assigning a name to each object. (Column 10, lines 9-16: A developer can name output files regarding to document instances. In addition, Column 10, lines 37-39, disclosing naming electronic form fields, in which are part of a electronic form being a document)

As per dependent Claim 32, Poole et al discloses his invention is described within the context of object-oriented programming implementation, (Column 6, lines 10-14) fails to specifically disclose associating each object with a parent having a name. However, it was well-known to one of ordinary skill in the art at the time of Applicant's invention that a document can compose of many components (such as in Poole et al's ,FIG 1) and/or many pages in which the parent object would be the overall document file, named by the user, and each component and/or page would be child objects associated with the parent object corresponding to the document.

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's with objects since it would provide the benefit of promoting greater flexibility and maintainability in programming.

As per independent Claim 34, Claim 34 recites similar limitations as in Claim 19 and 27 combined and are rejected under similar rationale.

As per independent Claim 35, Claim 35 recites similar limitations as in Claim 19 and 27 combined and are rejected under similar rationale.

As per dependent Claim 36, Claim 36 recites similar limitations as in Claim 19 is rejected under similar rationale.

As per dependent Claim 38, Claim 38 recites similar limitations as in Claim 19 is rejected under similar rationale.

As per independent Claim 39, Claim 39 recites similar limitations as in Claim 19 and is rejected under similar rationale.

As per dependent Claim 40, Claim 40 recites similar limitations as in Claim 19 is rejected under similar rationale.

As per dependent Claim 42, Claim 42 recites similar limitations as in Claim 19 is rejected under similar rationale.

As per independent Claim 43, Claim 43 recites similar limitations as in Claim 19, and is rejected under similar rationale.

As per dependent Claim 44, Claim 44 recites similar limitations as in Claim 19 is rejected under similar rationale.

As per dependent Claim 45, Claim 44 recites similar limitations as in Claim 19 is rejected under similar rationale.

12. Claims 10-12, and 25-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Poole et al (US Patent #6,006,242, patented 12/21/1999) in further view of Moore et al (US Patent 5,630,127, published 5/13/1997)

As per dependent Claims 10-12, Poole et al discloses storing data into the Knowledge Base, but fails to specify disclose the knowledge base is configured to be loaded by press process and includes a plurality of stored procedures. However, Moore et al discloses storing rules as objects in a relational database. (Abstract, line 2-5; Column 4, lines 52-61; Claim 11)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's and Bantz et al's methods with Moore et al's

method since Moore et al's method would have provided the benefit to the user to easily modify existing rules and create new rules.

As per dependent Claims 25-26, Claim 25-26 recites similar limitations as in Claims 10-11, and similarly rejected under rationale.

13. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Poole et al (US Patent #6,006,242, patented 12/21/1999) in further view of Ramelson et al (US PGPub 2004/0250059, filed 4/15/2003)

As per dependent claim 33, Claim 33 recites similar limitations as in Claim 32, and is rejected under rationale. Furthermore, Poole et al fails to specifically disclose assigning at least one object to a precedence level. However, Phillips et al discloses assigning precedence to objects, wherein the object is a rule. (Paragraph 0132)

It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have combined Poole et al's with Phillips et al's method since it would have provided the benefit of better maintainability and customability for enabling users to set order of objects.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Black et al (US Patent #6,763,500): Discloses dynamic document generation using schemas.

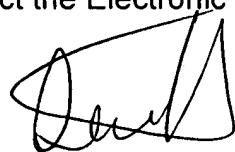
- Moody (US Patent #6,188,999): Discloses using object-oriented databases.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Faber whose telephone number is 571-272-2751. The examiner can normally be reached on M-F from 8am to 430pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Hong, can be reached on 571-272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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